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## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

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(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 60,469-073	<b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPBA/416)	
International application No. PCT/US03/10563	International filing date (day/month/year) 07 April 2003 (07.04.2003)	Priority date (day/month/year)
International Patent Classification (IPC) or national classification and IPC IPC(7): B66B 7/04 and US Cl.: 187/410		
Applicant OTIS ELEVATOR COMPANY		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

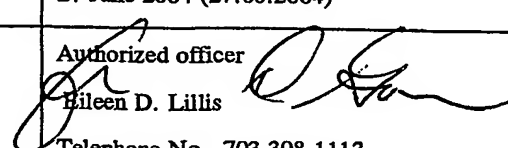
2. This REPORT consists of a total of 3 sheets, including this cover sheet.

☒ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of 3 sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of report with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

Date of submission of the demand 23 March 2004 (23.03.2004)	Date of completion of this report 27 June 2004 (27.06.2004)
Name and mailing address of the IPEA/US Mail Stop PCT, Attn: IPEA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (703) 305-3230	Authorized officer  Eileen D. Lillis Telephone No. 703-308-1113

# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/US03/10563

## I. Basis of the report

### 1. With regard to the elements of the international application:\*

- ☐ the international application as originally filed.
- ☒ the description:  
 pages 1-8 as originally filed  
 pages NONE, filed with the demand  
 pages NONE, filed with the letter of \_\_\_\_\_
- ☒ the claims:  
 pages NONE, as originally filed  
 pages NONE, as amended (together with any statement) under Article 19  
 pages 9-11, filed with the demand  
 pages NONE, filed with the letter of \_\_\_\_\_
- ☒ the drawings:  
 pages 1-3, as originally filed  
 pages NONE, filed with the demand  
 pages NONE, filed with the letter of \_\_\_\_\_
- ☐ the sequence listing part of the description:  
 pages NONE, as originally filed  
 pages NONE, filed with the demand  
 pages NONE, filed with the letter of \_\_\_\_\_

### 2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language \_\_\_\_\_ which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and/or 55.3).

### 3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in printed form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

### 4. ☒ The amendments have resulted in the cancellation of:

- ☐ the description, pages NONE
- ☒ the claims, Nos. 18-19
- ☐ the drawings, sheets/fig NONE

### 5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).\*\*

\* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17).

\*\* Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.  
PCT/US03/10563

## V. Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

### 1. STATEMENT

Novelty (N)	Claims <u>1-17</u>	YES
	Claims <u>NONE</u>	NO
Inventive Step (IS)	Claims <u>1-17</u>	YES
	Claims <u>NONE</u>	NO
Industrial Applicability (IA)	Claims <u>1-17</u>	YES
	Claims <u>NONE</u>	NO

### 2. CITATIONS AND EXPLANATIONS

Claims 1-17 meet the criteria set out in PCT Article 33(2)-(3), because the prior art does not teach or fairly suggest an elevator system comprising a plurality of rollers supported on the mount such that the rollers rotate about axes that remain fixed relative to the mount and a biasing member resiliently urges the mount such that rollers contact opposite sides of the guide rail and the guiding device automatically positions the cab relative to the guide rails as amended and in combination with other limitations as recited in independent claims.

NEW CITATIONS

03/23/2004 TUE 12:23 FAX 12489888363 Carlson, Gaskey & Olds

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1. An elevator system, comprising:  
 at least one guide rail;  
 a cab that is adapted to move along the guide rail; and  
 5 a guiding device associated with the cab and including a roller mount,  
 a plurality of rollers supported on the mount such that the rollers rotate about axes that  
 remain fixed relative to the mount and a biasing member resiliently urges the mount  
 such that the rollers contact opposite sides of the guide rail and the guiding device  
 automatically positions the cab relative to the guide rail.

10 2. The system of claim 1, wherein the guiding device includes a base and  
 the roller mount is moveably supported on the base.

15 3. The system of claim 2, wherein the biasing member urges the mount  
 relative to the base to thereby urge the rollers into engagement with the rail.

4. The system of claim 1, wherein the biasing member comprises a  
 spring.

20 5. The system of claim 2, wherein the biasing member urges the roller  
 mount in a direction that resists lateral movement of the base relative to the guide rail.

25 6. The system of claim 5, including at least one low-friction insert  
 supported on the roller mount, the insert being adapted to resist movement of the base  
 in a direction perpendicular to the direction of lateral movement resisted by the  
 biasing member.

30 7. The system of claim 2, including a roller oriented generally  
 perpendicular to the rollers supported on the base.

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8. A device for guiding movement of an elevator cab along a guide rail, comprising:

- 5 a base;  
a roller mount moveably supported by the base;  
a plurality of rollers supported on the roller mount such that roller axes remain fixed relative to the mount; and  
10 a biasing member that urges the roller mount in a direction to urge the rollers into engagement with opposite sides the guide rail.

9. The device of claim 8, wherein the roller mount selectively rotates about an axis and the biasing member urges the roller mount to rotate in one direction about the axis.

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10. The device of claim 8, wherein the biasing member comprises a spring that resiliently maintains the roller mount in a selected position.

11. The device of claim 8, wherein the biasing member is operative to  
20 center the base relative to the guide rail.

12. The device of claim 11, including at least one other member that is operative to resist movement of the base in a direction perpendicular to a plane of the base.

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13. The device of claim 12, wherein the other member comprises an insert supported on the roller mount.

14. The device of claim 12, wherein the other member comprises a roller  
30 supported by the base and having an axis of rotation that is perpendicular to axes of the plurality of rollers.

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15. The device of claim 8, wherein the roller mount includes a brace member extending generally parallel to the roller axes and that is adapted to engage a surface on the guide rail responsive to lateral movement of the base relative to the guide rail.

16. The device of claim 8, wherein the base includes a guide surface adapted to engage a surface on a guide rail responsive to lateral movement of the base relative to the guide rail.

17. The device of claim 8, wherein the biasing member comprises a spring and a threaded member for adjusting a distance between a support surface on the roller mount and a support surface on the base to thereby selectively adjust a tension on the spring.